

South Carolina Industrial Storm Water Reissuance – Chamber of Commerce Technical Committee

Andrew Yasinsac, Jr.; March 7, 2008

South Carolina Department of Health
and Environmental Control

S.C. Industrial Storm Water



History

Initial issuance – September 1992

Term: 5 years

- Reissuance – January 1998
- 2nd reissuance – July 2004, but
appealed and effective July 1, 2005
- Present permit expiration – August 31,
2008

Expiration Dates.

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1998 permit expired **JANUARY 31, 2003**

New permit was issued May 31, 2005,

expires **AUGUST 31, 2008,**

which is a period of **5 years and 7 months.**

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Present Permit

- This permit is similar to the U.S. EPA model permit of 1991.
- Almost no submittal of monitoring data is required.
- Format was changed in 2005.
- A major change of including requirements for discharges to streams with issued total maximum daily loads (TMDL) was added in the 2005 permit. (Similar to EPA draft 2005 MSGP)

Next Reissuance

- U.S. EPA Region 4 encourages **no extension**, issuance of a permit similar to U.S. EPA Multi-sector general permit (MSGP), originally issued in 1995, reissued 2000, drafted for reissuance Dec. 2005.
- The Department is considering issuance of a separate general permit for cement/concrete facilities
- ???Any other categories

Major Differences — S.C to MSGP

- Specific effluent limits for **9 or more categories** of activities, versus a **single** category for the present S.C. IGP
- Specific pollutant levels at which about **21** (out of a total of 30) other categories of activity should obtain an individual permit plus
- TSS for all other categories.

Major Differences - Continued

- Specific requirements are stated related to compliance with water quality standards
- Specific BMP are stated in the permit for each of the categories
- Would require submittal of a new NoI, like EPA's. EPA's is 2 pages vs. our 1.

Example U.S. EPA BMP

- Glass, Clay, Cement, Concrete ...

E.3.2 *Good Housekeeping Measures.*

Prevent or minimize the discharge of spilled *material* in stormwater from *pavements*.

Consider sweeping regularly or using other equivalent measures

... prevent the exposure of fine granular solids ... to stormwater ... by storing ... in enclosed silos

MSGP Effluent Limit Categories

- 5.1.3.Coal pile runoff
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- A. Timber Products (15)
-
- C. Fertilizer Mfg.- Phosphate (12)
-
- D. Asphalt Roofing and Paving Materials (57)
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- E. Cement Mfg. Facility
- J. Mine dewatering activities (Not in this permit)
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- K. Hazardous Waste TSD Facilities
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- L. Landfills, land application sites, and open dumps (58, including TSD)
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- S. Air Transportation (89)

MSGP Categories Covered (1)

- Sector A--Timber Products
- Sector B--Paper and Allied Products Manufacturing
- Sector C--Chemical and Allied Products Manufacturing
- Sector D--Asphalt Paving and Roofing
- Sector E--Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing
- Sector F--Primary Metals
- Sector G--Metal Mining (Ore Mining and Dressing)
- Sector H--Coal Mines and Coal Mining-Related Facilities
- Sector I--Oil and Gas Extraction and Refining
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- Sector J--Mineral Mining and Dressing
- Sector K--Hazardous Waste Treatment Storage or Disposal
- Sector L--Landfills and Land Application Sites

MSGP Categories Covered (2)

- Sector M--Automobile Salvage Yards
- Sector N--Scrap Recycling Facilities
- Sector O--Steam Electric Generating Facilities
- Sector P--Land Transportation
- Sector Q--Water Transportation
- Sector R--Ship and Boat Building or Repairing Yards
- Sector S--Air Transportation Facilities
- Sector T--Treatment Works
- Sector U--Food and Kindred Products
- Sector V--Textile Mills, Apparel, and other Fabric Products Manufacturing
- Sector W--Furniture and Fixtures
- Sector X--Printing and Publishing

MSGP Categories Covered (3)

- Sector Y--Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
- Sector Z--Leather Tanning and Finishing
- Sector AA--Fabricated Metal Products
- Sector AB--Transportation Equipment, Industrial or Commercial Machinery
- Sector AC--Electronic, Electrical, Photographic and Optical Goods
- Sector AD--Reserved for Facilities Not Covered Under Other Sectors and Designated by the Director

S.C. Use of MSGP

- Add facilities not presently covered by the S.C. IGP, such as wet deck log storage yards, bulk cement handling facilities
- The U.S. EPA MSGP is presently out of date, (expired in 2005) possibly being issued this spring (2008). We probably will not redraft until this is issued.

Changes to U.S. EPA MSGP

- 2000 permit vs. proposed permit
- (EPA) discharge authorization time frame, training, monitoring, reporting, recordkeeping, inspections, and some sector-specific provisions;
- **30-day public comment period;**
- Authorization to discharge is granted at the end of the 30 day period, compared to 9-day authorization in S.C.;
- Benchmark Monitoring Requirements for Total Suspended Solids **(TSS) were added for each sector** where they were not otherwise included in the MSGP 2000

Cement Mfg. and Concrete

- Concern about high pH of storm water, TSS
- Concern about discharge to sensitive streams, such as trout waters, shellfish harvesting waters (SFH), and outstanding resource waters (ORW).
- About **165** concrete batch plants. Additional block plants and cement handling facilities.

Concrete Batch Plant Storm Water (1)



Concrete Batch Plant Storm Water (2)



Potential Cement/Concrete Permit Conditions

- (1) specific pH limits (such as are included in the MSGP for cement manufacturing),
- (2) quarterly monitoring of pH, TSS,
- (3) more-restrictive limits and more-frequent monitoring for discharges from truck washing,

Permit Conditions – Continued

- (4) restrictions on storm water discharges to sensitive waters (such as trout waters and shellfish harvesting waters, see S.C. Reg. 61-68 and 61-69), and
- (5) prohibition of discharge to outstanding resource waters (ORW).

Monitoring Data

- For the above requirements in the S.C. permit, it probably would be necessary for the Department to require submittal of monitoring data and to review the data.

Such review would likely lead to additional compliance and enforcement actions.

Reporting

- U.S. EPA permit requires **immediate** submittal. Our suggested submittal is **annual**, where **limits apply**.
- Reporting of benchmark data may require submittal (1) within 30 days of an exceedance or (2) annually for any exceedance with corrective action information.

Typical Existing Permit Non-Compliance

- not having a signed non-storm water discharge certification (see 1.3.B and 3.4.C.7 of the permit),
- annual comprehensive inspections not being conducted (see 3.4.D of the permit),
- annual/semi-annual sampling not being done (see 5.2.B and C of the permit),
- failure to have a PE recertify the SWPPP every three years at a Section 313 site (see 3.4.F.2(j) of the permit), and
- general poor housekeeping.

Compliance Issues (1)



Compliance Issues (2)



Notice of Intent (NoI)

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A new Notice of Intent will be required,
comparable to the **U.S. EPA NoI**.

We will probably require a **USGS map**
showing site location.

The **submittal date may follow issuance**
of the permit, ??? possibly being staggered.

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Non-storm Water Discharges

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**Our list appears to include all of U.S. EPA's listed items,
some of which were added to our permit in 2005.**

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Pavement Deicing

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The 2005 DHEC permit

**authorizes industrial pavement deicing
and includes specific requirements**

for it. Item 3.4.H.

We will propose to continue to include this.

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TMDL

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“Discharging into Receiving Waters with an Approved Total Maximum Daily Load Analysis”, TMDL

– Section 1.3.D of the permit:

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Impaired Waters w/o TMDL

(New req't from 2005 U.S. EPA draft MSGP.)

- **1.2.4.9 *New Discharges to Water Quality Impaired Receiving Waters.*** The provisions of this part apply to operators of new discharges, as defined in Appendix A, proposing to discharge to an impaired water for which a TMDL has not yet been developed. To satisfy the requirements of 40 CFR 122.4(i) that the discharge from the construction or operation of a new discharger not cause or contribute to a violation of water quality standards, the operator of the facility that is the new discharger must:
 - 1) **eliminate all exposure** to stormwater of the pollutant(s) for which the waterbody is impaired, and properly document no exposure in the SWPPP, **OR**
 - 2) obtain written clarification from the appropriate State ... water quality agency that the discharge is **not expected to cause or contribute** to a violation of a water quality standard, and file such notification with the SWPPP.

General Compliance

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Permit items 1.3.D.1 and 2

**require general compliance with approved
TMDL.**

What this means is that, if there are specific requirements in TMDL related to specific dischargers or categories of dischargers, they must comply with those requirements.

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Impaired-Waters Monitoring

- **Existing permit** requires water-quality related monitoring only for **approved TMDL**
- **New permit** will require monitoring for **any impaired waters**

Applicable Waters

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Impaired waters:

“A water is impaired if it does not meet its designated uses.” This includes

waters on the 303[d] list or

having an approved TMDL.

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Follow-up Monitoring

- Follow-up monitoring is required when benchmark or limits-related monitoring exceeds stated criteria.
- 4 additional quarters for benchmark
- 1 additional sample for limits (plus annual)

Purpose of the Monitoring

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(1) Meet the requirements of the regulation
(U.S. EPA regulation 40 CFR130.7) and U.S. EPA, Region IV, essentially
to show that storm water will not contribute
to violation of a stream standard.

(2) Augment BMP to achieve compliance,
if necessary.

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Exemptions

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No monitoring

is required of any storm water permittee when the TMDL is for

D.O. (dissolved oxygen).

**The permit also allows
justification for not monitoring.**

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TMDL Monitoring

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**Monitoring must begin within
90 days after the requirement applies
and be completed
within one year of the requirement applying.**

Monitoring must include

4 samples per outfall.

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Consequences

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Monitoring results

**must meet the stream standard
or additional actions are required.**

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Criteria

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Item 1.3.D.3(f) of the permit states the

**criteria under the permit for meeting
the stream standard.**

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Toxicity

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(Toxicity revisions include allowance of **salting test solutions** to prevent toxicity caused by low dissolved solids in rainfall.)

Toxicity testing likely will be eliminated.

No limits were included in the 2005 DHEC permit,
so antibacksliding does not apply.

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Contact

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For more information about the permit, contact

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